

Listing of Claims:

This listing of claims reflects all claim amendments and replaces all prior versions, and listings, of claims in the application. Material to be inserted is in **bold and underline**, and material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[]].

1-5. (Cancelled)

6. (Currently Amended) ~~A system according to claim 5, in which the plurality of antenna array segments are~~ **An imaging system comprising:**

an array frame;

a plurality of antenna array segments adapted to be mounted to the array frame, each array segment including a segment frame, a plurality of antenna units mounted relative to the segment frame and configured to transmit toward and receive from a subject in a subject position, electromagnetic radiation in a frequency range of about 200 MHz to about 1 THz, from antenna positions spaced from the subject position, the array segments being oriented at different angles relative to each other **and adapted to be mounted to the array frame with the antenna units from the array segments collectively forming an antenna array;**

a transceiver configured to operate the antenna array and produce an output representative of the received radiation; and

a processor adapted to convert the transceiver output into image data representative of an image of the subject.

7. (Previously presented) A system according to claim 6, in which the antenna array extends along an arc.

8. (Original) A system according to claim 7, in which the plurality of antenna units in each antenna array segment extend rectilinearly along the segment frame relative to which they are mounted.

9-12. (Cancelled)

13. (Currently amended) ~~A method according to claim 12, in which transmitting radiation includes transmitting radiation from~~ **A method of imaging comprising:**

transmitting toward a subject in a subject position, electromagnetic radiation in a frequency range of about 200 MHz to about 1 THz, from a plurality of antenna array segments, each array segment including a plurality of antenna units, with the antenna units from the array segments collectively forming an antenna array, with the antenna array segments **being** oriented at different angles relative to each other along the array;

receiving at each of the plurality of antenna array segments electromagnetic radiation reflected from the subject;

producing a segment output representative of the radiation received at each array segment; and

converting the segment output into image data representative of an image of the subject.

14. (Original) A method according to claim 13, in which transmitting radiation includes transmitting radiation from antenna array segments extending along an arc.

15. (Original) A method according to claim 14, in which transmitting radiation includes transmitting radiation from antenna units extending rectilinearly in each antenna array segment.

16-18. (Cancelled)

19. (Currently amended) ~~A system according to claim 18, in which the means for transmitting radiation is further for transmitting radiation from~~ **A system of imaging comprising:**

means for transmitting toward a subject in a subject position, electromagnetic radiation in a frequency range of about 200 MHz to about 1 THz, from a plurality of antenna array segments, each array segment including a plurality of antenna units, with the antenna units from the array segments collectively forming an antenna array, with the antenna array segments oriented at different angles relative to each other along the array;

means for receiving at each of the plurality of antenna array segments electromagnetic radiation reflected from the subject;

means for producing a segment output representative of the radiation received at each array segment; and

means for converting the segment output into image data representative of an image of the subject.